Attachment 3 ConocoPhillips Letter of March 12, 2008



ConocoPhillips Company San Francisco Refinery 1380 San Pablo Avenue Rodeo, CA 94572

March 12, 2008

ESDR-099-08 03-001-02-A

CERTIFIED MAIL - 7006 0810 0003 4487 4734

Ms. Brenda Cabral Supervising Air Quality Engineer Bay Area Air Quality Management District 939 Ellis Street San Francisco. CA 94109

Subject: Comments on Significant Revision to Major Facility Review Permit -

Application #10994

Refinery MACT II (40 CFR 63 UUU) Permit Conditions ConocoPhillips San Francisco Refinery – Facility A0016

Ms. Cabral:

The following submittal is a response to the January 22, 2008 public comment period issuance of draft permit 10994. There are a few issues that are addressed in this submittal:

SRU Sulfur Pit Vents & NSPS J Applicability - ConocoPhillips (COP) believes that the Sulfur Pits are not subject to NSPS J at this time. In an email submittal on July 6, 2007 to BAAQMD, COP struck references to NSPS J applicability in respect to draft language regarding Application 12931. The COP EPA Consent Decree mandates certain control requirements for sulfur pits, but does not require accepting NSPS J applicability for the pit vents. In addition, although proposed EPA NSPS J revisions identify the Pit Vents as subject to NSPS J this revised draft rule has not yet been finalized. Many trade organizations (NPRA, API, WSPA) and individual companies have opposed this portion of the draft regulation and have stated that EPA has not yet done the cost-effective evaluation or included critical elements and details such as maintenance allowances and monitoring of emissions if these vents are to be deemed as NSPS J applicable. Thus, it is premature to assume this portion of the proposed rule will be codified and any future revisions to NSPS J should be incorporated after the rule revision is finalized. The attached Statement of Basis (SOB) and draft Title V permit conditions have been revised (underline/strikeout) to reflect the recommended COP revisions.

Catalytic Reformer Control Requirements – Under RMACT II, there are a number of options for controlling emissions during depressuring and purging, coke burn-off and catalyst regeneration. There is also an option to exempt these emissions from control if vented to fuel gas recovery (40 CFR 63.1562(f)(5)). During a recent catalyst regneneration event COP personnel were able to successfully vent to fuel gas recovery during the Depressuring and Purging step without flaring. Prior to the turnaround we discussed many options for controlling emissions. It is important to allowable flexibility in controlling emissions. Although, it is likely over time that a certain method will be chosen for each affected unit, it is important to allow for flexibility. Thus, the attached

Page 2

Statement of Basis (SOB) and draft Title V permit conditions have been revised to reflect revisions that will allow for future flexibility as is contemplated in the RMACT II regulation.

Some of the Table IV and VII references to control options have been revised due to the control requirements being inaccurately linked with monitoring requirements applying to the incorrect control option (i.e. flare control option being linked to 92% control monitoring requirements). These errors may have been present during COPs initial permit application submittal.

8-10-301 Applicable Pressure Limit – the document has been revised to show the
applicable pressure cutoff for a vessel in both Metric (1000 Hg) and English units (4.6
psig) for easier review as the facility generally works in English units.

An electronic version of the underline/strikeout will be submitted so that the suggested revisions can more easily be identified. Please contact Jennifer Ahlskog at (510) 245-4439 if you have questions or require further information.

Sincerely,

Philip C. Stern, Manager

Health, Safety and Environment

Enclosures via email

cc: Barry Young (via e-mail: BYoung@baaqmd.gov)

Brian Bateman (via e-mail: BBateman@baaqmd.gov) Sanjeev Kamboj (via e-mail: SKamboj@baaqmd.gov)

Table II B - Abatement Devices

経過を必要		できた要権のと発わる	China layorang yang seltam		(日本集集: ことといる部分が計)
Δ#	Description 1	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
S296	C-1 Flare (main refinery	S306, S308	40 CFR	Flame detection by	98% control of
	flare, elevated, steam-		63.1566(a)(1)	thermocouple	non-methane
	assisted, serves S304, S305,		(ii)		TOC by weight
	S306)				<u>or</u>
					concentration
					of 20 ppmw as
					hexane, dry @
				1	3%-02,
					whichever is
					less stringent
					Must meet
					control device
					requirements
					<u>in 63.11(b)</u>
					(Applies-to
					\$306, mMay
					apply to S306
					or S308
S398	MP-30 Flare (backup	S306, S308	40 CFR	Flame detection by	98% control of
	refinery flare, elevated,		63.1566(a)(1)	thermocouple	non-methane
	steam-assisted, serves S304,	,	(ii)		TOC by weight
	S305, S306)				<u>0</u> f
					concentration
					of 20 ppniw as
					hexane, dry @
					3% O2,
					whichever is
					less-stringent
					Must meet
					control device
					requirements
					in 63.11(b)
					(Applies to
					S306: mMay
					apply to \$306
					or S308

III. Generally Applicable Requirements

No changes to this section are proposed in this action.

Table IV - Na

Source-specific Applicable Requirements – Process Vessels S304 –U-229 LIGHT NAPHTHA HYDROTREATER;

S305 - U-230 Prefractionator / Naphtha Hydrotreater;

S306 - U-231 PLATFORMING UNIT; S307 - U-240 UNICRACKING UNIT;

S308 - U-244 REFORMING UNIT; S309 - U-248 UNISAR UNIT;

S318 – U-76 GASOLINE / MID-BARREL BLENDING UNIT;

S319 - U-215 GASOLINE FRACTIONATING UNIT;

S322 – U-40 RAW MATERIALS RECEIVING; S435 – REFORMATE SPLITTER; S436 – DEISOPENTANIZER; S437 – HYDROGEN PLANT;

S460 - U-250 ULSD HYDROTREATER

i fara samatiku	5400 - U-250 ULSD HIDROIREATER	Federally :	Future
Applicable	Regulation Title or	Enforceable	
Requirement	Description of Requirement	(Y/N)	70 77 77 77 77 77 77 77 77 77 77 77 77 7
	300 ppm carbon on a dry basis		
BAAQMD	Organic Compounds – Process Vessel Depressurization		
Regulation 8,	(1/21/2004)		
Rule 10			
8-10-301	Depressurization Control Options	N	
8-10-302	Opening of Process Vessels	N	
8-10-302.1	organic compounds cannot exceed 10,000 ppm (methane) prior to release to atmosphere	N	
8-10-302.2	Organic compound concentration of a refinery process vessel may exceed 10,000 ppm prior to release to atmosphere provided total number of such vessels during 5-year period does not exceed 10%	N	
8-10-401	Turnaround Records. Annual report due February 1 of each year with initial report of process vessels due 4/1/2004.	N	
8-10-501	Monitoring prior to and during process vessel opening	Y	
8-10-502	Concentration measurement using EPA Method 21	Y	
8-10-503	Recordkeeping	N	
8-10-601	Monitoring Procedures	N	
SIP	Organic Compounds - Process Vessel Depressurization (7/20/83)		
Regulation 8,			
8-10-301	Process Vessel Depressurizing. POC emissions shall be vented through a knock-out pot and then abated in one of the following ways, to as low a vessel pressure as possible, but at least until pressure is reduced to less than 1000 mm Hg (4.6 psig):	Y	
8-10-301.1	recovery to the fuel gas system	Y	
8-10-301.2	combustion at a firebox or incinerator	Y	
8-10-301.3	combustion at a flare	Y	
8-10-301.4	containment such that emissions to atmosphere do not occur	Y	
8-10-401	Turnaround Records, The following records shall be kept for each process unit turnaround, and retained for at least 2 years and made available to the District on demand during inspections:	Y	
8-10-401.1	date of depressurization event	.Y	

<u>Table IV – Nb</u> <u>Source-specific Applicable Requirements – Process Vessels</u> 06 – U-231 PLATFORMING UNIT; S308 – U-244 REFORMING UNIT

<u>S</u> :	<u> 306 – U-231 Platforming Unit; S308 – U-244 Ref</u>	ORMING UNIT	Commission was an engage.
Applicable Requirement	Regulation Title or F Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD	Organic Compounds – Process Vessel Depressurization		
Regulation 8,	(1/21/2004)		
Rule 10			
8-10-301	Depressurization Control Options	N	
8-10-302	Opening of Process Vessels	N	
8-10-302.1	organic compounds cannot exceed 10,000 ppm (methane) prior to release to atmosphere	N	·
8-10-302.2	Organic compound concentration of a refinery process vessel may exceed 10,000 ppm prior to release to atmosphere provided total number of such vessels during 5-year period does not exceed 10%	N	
8-10-401	Turnaround Records. Annual report due February 1 of each year with initial report of process vessels due 4/1/2004.	N	
8-10-501	Monitoring prior to and during process vessel opening	Y	
8-10-502	Concentration measurement using EPA Method 21	Y	
8-10-503	Recordkeeping	N	
8-10-601	Monitoring Procedures	N	
SIP	Organic Compounds – Process Vessel Depressurization (7/20/83)		
Regulation 8,	· ·		
Rule 10	,		
8-10-301	Process Vessel Depressurizing. POC emissions shall be vented	Y	
	through a knock-out pot and then abated in one of the following		
	ways, to as low a vessel pressure as possible, but at least until		
	pressure is reduced to less than 1000 mm Hg1000 mm Hg (4.6 psig):		
8-10-301.1	recovery to the fuel gas system	Y	
8-10-301.2	combustion at a firebox or incinerator	Y	
8-10-301.3	combustion at a flare	Y	
8-10-301.4	containment such that emissions to atmosphere do not occur	Y	
8-10-401	Turnaround Records. The following records shall be kept for each process unit turnaround, and retained for at least 2 years and made available to the District on demand during inspections:	Y	
8-10-401.1	date of depressurization event	Y	
8-10-401.2	approximate vessel hydrocarbon concentration when emissions to	Y	
0.10.401.0	atmosphere begin approximate quantity of POC emissions to atmosphere	Y	
8-10-401.3	approximate quantity of POC emissions to authosphere General Provisions (3/16/94)		
40 CFR 63,	General Provisions (3/10/24)		
Subpart A 63.1	Applicability (except that Subpart UUU specifies calendar or	Y	
	operating day)		ļ
63.2	Definitions	Y	
63.3	Units and Abbreviations	Y	

<u>Table IV – Nb</u> <u>Source-specific Applicable Requirements – Process Vessels</u> <u>S306 – U-231 PLATFORMING UNIT; S308 – U-244 REFORMING UNIT</u>

<u>5</u>	306 - U-231 PLATFORMING UNIT; 5308 - U-244 KE	ORIGINATION CITY	
Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.10(f)	Waiver of recordkeeping or reporting requirements	Y	
63.11	Control device requirements (Applicable to flares)	Y	
63.15	Availability of information and confidentiality	Y	
40 CFR 63	National Emission Standards for Hazardous Pollutants for	Y	
Subpart	Petroleum Refineries: Catalytic Cracking Units, Catalytic		
UUU	Reforming Units, and Sulfur Recovery Units (4/11/02)		
63.1561	Am I subject to this subpart?	Y	
63.1562(a)	New, reconstructed, or existing affected sources	Y	
63.1562(b)(2)	Catalytic reforming units	Y	
63.1562(f)(5)	Subpart does not apply to gaseous streams routed to a fuel gas	· <u>Y</u>	VALUE :
	system (exempts \$306 & \$308 from 63.1566 when these de-pressure		9995
	& purge to fuel gas)		
63.1563	When do I have to comply with this subpart?	Y	
	Deadline for existing sources-4/11/05	Y	
	Notification requirements	Y	_
63.1566	What are my requirements for organic HAP emissions from catalytic	Y	
	reforming units?		
63.1566(a)	Emission Limitations and Work Practice Standards	Y	
63.1566(a)(1)	Meet each emission limitation in Table 15 that applies	Y	
63.1566(a)(1) (i)	Vent TOC emissions to flare or comply with 63.1566(a)(1)(ii)	Y	
63.1566(a)(1)	TOC or non-methane TOC percent reduction standard or	Y	
(ii)	concentration limit, whichever is less stringent or comply with		
	63.1566(a)(1)(i)		
63.1566(a)(2)	Comply with option 1 in Table 16: flare pilot light must be on and	Y	150 days
	flare must be operating at all times that emissions from S306 or		after 1st
	S308 regeneration vented to flare		regeneration
			after 4/11/05
63.1566(a)(3)	Applicability of emission limitations-emissions from catalytic	Y	150 days
	reforming unit process vents associated with initial catalyst		after 1 ⁵¹
1	depressuring and catalyst purging operations that occur prior to the	-	regeneration after 4/11/05
	coke burn-off cycle. The emission limitations in Tables 15 and 16 of		aile: 4/11/05
	this subpart do not apply to the coke burn-off, catalyst rejuvenation, reduction or activation vents, or to the control systems used for these		
	vents.		
	Emission limitations do not apply when the vessel is below 5 psig	Y	150 days
		1	after 1st
			regeneration
			after 4/11/05

<u>Table IV – Nb</u>
<u>Source-specific Applicable Requirements – Process Vessels</u>
S306 – U-231 PLATFORMING UNIT; S308 – U-244 REFORMING UNIT

<u>S</u> :	<u> 306 – U-231 Platforming Unit; S308 – U-244 Ref</u>		reservant all allem
Applicable: Requirement	Regulation Title or: Description of Requirement	Federally Enforceable (Y/N)	Effective Date
63.1566(a)(5)	Prepare an Operation, Maintenance and Monitoring Plan and	Y	150 days
() / /	operate in compliance with the plan		after 1st
			regeneration
			after 4/11/05
63.1566(b)	How do I demonstrate initial compliance with the emission	Y	
()	limitations and work practice standard?		
63.1566(b)(1)	Install, operate, and maintain a continuous monitoring system(s)	Y	
63.1566(b)	Applies to S308, may apply to S306	Y	1 st Regen
(2): Option 1	Conduct each performance test required by Table 18: Option 1 or		after
(-)	Option 2		4/11/2005
63.1566(b)	May apply to S306	¥	4 st -Regen
(2): Option 2	Conduct each performance test required by Table 18: Option 2		after
(=). •			4/1-1/2005
63.1566(b)(3)	May apply to S306	Y	1 st Regen
03.1300(0)(0)	Establish each site-specific operating limit in Table 16 that applies	1 .	after 4/11/05
63.1566(b)(4)		Y	1st Regen
03.1300(0)(1)	Determine initial compliance with emission limitations		after
			4/11/2005
63.1566(b)(5)	No requirement to perform TOC performance test if emissions are	Y	
(i)	vented to a flare as provided in Option 1 of Table 15		
63.1566(b)(6)	Demonstrate initial compliance with each emission limitation that	Y	1 st Regen
03.1300(0)(0)	applies according to Table 19		after 4/11/05
63.1566(b)(7)	Demonstrate Initial Compliance with Work Practice Standard by	Y	150 days
03.1300(0)(1)	submitting Operation, Maintenance, and Monitoring Plan		after 1st
			Regen after
			4/11/05
63.1566(b)(8)	Submit the Notification of Compliance Status per §63.1574	Y	150 days
05.1500(0)(0)			after 1st
			Regen after
			4/11/05
63.1566(c)	How do I demonstrate continuous compliance with the emission	Y	150 days
55.1500(0)	limitations and work practice standards?		after 1st
			Regen after
			4/11/05
63.1566(c)	Demonstrate continuous compliance with emission limitations in	Υ .	150 days
(1)	Table 15 and Table 16		after 1 st
(*)			Regen after
			4/11/05
63.1566(c)	Demonstrate continuous compliance with work practice standards by	Y	150 days
(2)	complying with the procedures in the operation, maintenance, and		after 1 st

Section

Reason not applicable:

63.1576(c)

No MACT opacity standard

Changes to the requirements for S1001-S1003, Sulfur Recovery Units (SRUs) and S301-S303, Sulfur Pits

The requirements of 40 CFR 63, Subparts A and UUU have been added.

The changes made to the conditions for S301, S302, and S303, Sulfur Pits, in Applications 13424 and 14883 are being incorporated in this action. In addition, the sulfur pits will be subject to the Refinery NSPS.

Table 44 of Subpart UUU has the detail of which parts of 40 CFR 63, Subpart A, General Provisions, apply to these sources. The detail is included in the permit.

The citation of BAAQMD Regulation 6-310.3 has been corrected to 6-310 because the SRUs are not heat transfer equipment. The citation in Section VII is correct. BAAQMD Regulation 6-311 has been added because it was omitted in error.

The note about the requirement for installation of sulfur recovery units if a facility recovers more than 16.5 ton/day of elemental sulfur from refinery fuel gas and process water streams has been deleted because the facility has installed the SRUs long ago.

The throughput limit in BAAQMD Regulation 20989 for the SRUs, S1001-S1003, and the sulfur pits, S301-S303, will be deleted and the throughput limits will be added to BAAQMD Conditions 19278 and 22964 because the sources are no longer grandfathered after the changes authorized in Application 5814, which were finalized on January 25, 2006. This change should have been included in the revisions of March 2, 2006.

Following the table is a list showing determinations of non-applicability of various parts of the rules for the sulfur recovery units.

As mentioned in Section A of this statement of basis, 40 CFR 60, Subparts A and J, are being added to the SRU table due to a consent decree entered by the US District Court for the Southern District of Texas against ConocoPhillips.

Table IV - U

Source-specific Applicable Requirements
S1001 – Sulfur Plant Unit 234, S1002 – Sulfur Plant Unit 236
S1003 – Sulfur Plant Unit 238, S301 – Molten Sulfur Pit 234
S302 – Molten Sulfur Pit 236 and S303 – Molten Sulfur Pit 238

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter and Visible Emissions (12/19/90)		

$Table\ IV-U$ $Source-specific\ Applicable\ Requirements$ $S1001-SULFUR\ PLANT\ UNIT\ 234\ ,\ S1002-SULFUR\ PLANT\ UNIT\ 236$

S1003 – SULFUR PLANT UNIT 238, S301 – MOLTEN SULFUR PIT 234 S302 – MOLTEN SULFUR PIT 236 AND S303 – MOLTEN SULFUR PIT 238

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Regulation 6			
6-301	Ringelmann #1 Limitation	Y	
6-305	Visible Particles	Y	
6-310.3	Particulate Weight Limitation	Y	
6-311	General Operations	Y ·	
6-330	Sulfur Recovery Units (SO3, H2SO4 emission limitations)	Y	
6-401	Appearance of Emissions	Y	
BAAQMD	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)		
Regulation 9,			
Rule 1 9-1-313	Sulfur Removal Operations at Petroleum Refineries (processing more than 20,000 bbl/day of crude oil)	N	
9-1-313.2	operation of a sulfur removal and recovery system that removes and recovers: 95% of H2S from refinery fuel gas, 95% of H2S and ammonia from process water streams (sulfur recovery is required when a facility removes 16.5 ton/day or more of	N	
	elemental sulfur).	,	
SIP	Inorganic Gaseous Pollutants – Sulfur Dioxide (6/8/99)		
Regulation 9,			
Rule 1	Sulfur Removal Operations at Petroleum Refineries (processing	Y	
9-1-313	more than 20,000 bbl/day of crude oil)	_	
9-1-313.2	operation of a sulfur removal and recovery system that removes and recovers: 95% of H2S from refinery fuel gas, 95% of H2S and ammonia from process water streams	Y – note 1	
40 CFR 60	General Provisions (03/16/1994) for S1001, S1002, & S1003		
Subpart A			
60.7	Notification and record keeping	Y	
60.7(a)(5)	Notification of beginning of demonstration of continuous monitoring system	Y	
60.7(b)	Records of startup, shutdown, or malfunction, malfunction of control equipment; or periods when CEM is inoperative	¥	
60.7(c)	Excess emissions and monitoring systems reports	Y	
60.7(d)	Format of summary report forms	. <u>Y</u>	
60.7(f)	Records	Y	
60.8	Performance tests	Y	
60.11	Compliance with standards and maintenance requirements	Y	
60.11(a)	Compliance determined by performance tests and CEM	Y	<u> </u>

Table IV - U

Source-specific Applicable Requirements

S1001 – SULFUR PLANT UNIT 234, S1002 – SULFUR PLANT UNIT 236 S1003 – SULFUR PLANT UNIT 238, S301 – MOLTEN SULFUR PIT 234

S302 - MOLTEN SULFUR PIT 236 AND S303 - MOLTEN SULFUR PIT 238

Applicable: Regulation Title of the Regulation of Regulation Control practice of the Control of Regulation of CEMs and Formation of Regulation of CEMs and Formation of Regulation of CEMs and Formation of Regulation drifts 60.13(c)	83	02 – MOLTEN SULFUR PIT 236 AND S303 – MOLTEN		
Solid	/ Land and Land 1997 1997	[1924] 1925 [1925] [1925] [1925] [1925] [1925] [1925] [1925] [1925] [1925] [1925] [1925] [1925] [1925] [1925]	Enforceable	Effective
Description	60.11(d)	Good air pollution control practice	<u>Y</u>	
60.11(g) Credible evidence	60.11(f)	applicable subpart shall supersede any conflicting provisions in	Y	
Sol.12 Circumvention		paragraphs (a) through (e)		
Sol.13 Monitoring requirements Y	60.11(g)	Credible evidence	<u>Y</u>	
Sol.13(a) CEMs subject to Appendices B and F	<u>60.12</u>	Circumvention	<u>Y</u>	
Sol.13(b) Installation of CEMs before performance tests Y	60.13	Monitoring requirements	Y	
Go.13(d)(1) Zero and span calibration drifts Y Go.13(e) Continuous operation; minimum frequency of operation Y Go.13(e)(2) Monitoring cycle every 15 minutes Y Go.13(f) Representative measurements Y Go.19 General notification and reporting requirements Y Y Y Y Y Y Y Y Y	60.13(a)	CEMs subject to Appendices B and F	<u>Y</u>	
Sol.13(e) Continuous operation: minimum frequency of operation Y	60.13(b)	Installation of CEMs before performance tests	<u>Y</u>	
Sol.13(e)(2) Monitoring cycle every 15 minutes	60.13(d)(1)	Zero and span calibration drifts	<u>Y</u>	
50.13(e)(2) Monitoring cycle every 15 minutes	60.13(e)	Continuous operation; minimum frequency of operation	<u>Y</u>	
Solid Representative measurements	60.13(e)(2)	Monitoring cycle every 15 minutes	<u>Y</u>	
Sol.19 General notification and reporting requirements Y	60.13(f)	Representative measurements	<u>Y</u>	
NSFS Standards of Performance for Petroleum Refineries (7/1/00) for S1001, S1002, & S1003		General notification and reporting requirements	<u>Y</u>	
A0 CFR 60 Subpart J Subpart J		Standards of Performance for Petroleum Refineries (7/1/00) for		
Subpart J 60.104 Standards for Sulfur Oxides Y 60.104(a)(2) Sulfur dioxide (SO2) less than 250 ppm at 0% excess air Y 60.105 Monitoring of Emissions and Operations Y 60.105(a) Continuous Monitoring systems Y 60.105(a)(5) SO2 and O2 monitors Y 60.105(a)(5) Span values: 500 ppm SO2 and 25% O2 Y 60.105(a)(5) The performance evaluations for this SO2 monitor under \$60.13(c) Y 60.105(a)(5) The performance Specification 2. Methods 6 or 6C and 3 or 3A 60.105(e)(4) Periods of excess emissions Y 60.105(e)(4) 12-hour periods where concentration exceeds average of 250 ppm. Y 60.105(a)(5) Test methods and procedures Y 60.106(a) Methods in Appendix A Y 60.106(f) Determination of compliance with SO2 limit Y 60.106(f)(1) Methods to determine SO2 concentration Y 60.106(f)(3) Methods to determine O2 concentration Y 60.106(f)(3) Methods to determine O2 concentration Y		S1001, S1002, & S1003		
60.104(a)(2) Sulfur dioxide (SO2) less than 250 ppm at 0% excess air (i) 60.105 Monitoring of Emissions and Operations Y 60.105(a) Continuous Monitoring systems Y 60.105(a)(5) SO2 and O2 monitors Y 60.105(a)(5) Span values: 500 ppm SO2 and 25% O2 Y (ii) 60.105(a)(5) The performance evaluations for this SO2 monitor under \$60.13(c) Shall use Performance Specification 2. Methods 6 or 6C and 3 or 3A Shall be used for conducting the relative accuracy evaluations 60.105(e)(4) Periods of excess emissions Y 60.105(e)(4) 12-hour periods where concentration exceeds average of 250 ppm, (i) dry, at 0% O2 60.106 Test methods and procedures Y 60.106(a) Methods in Appendix A Y 60.106(f) Determination of compliance with SO2 limit Y 60.106(f)(1) Methods to determine SO2 concentration Y Methods to determine O2 concentration				
Gi	60.104	Standards for Sulfur Oxides	<u>y</u> .	
Monitoring of Emissions and Operations Y		Sulfur dioxide (SO2) less than 250 ppm at 0% excess air	Y	
60.105(a) Continuous Monitoring systems Continuous Monitoring systems Solution Solu		Monitoring of Emissions and Operations	Y	
60.105(a)(5) SO2 and O2 monitors Y 60.105(a)(5) Span values: 500 ppm SO2 and 25% O2 (i) The performance evaluations for this SO2 monitor under §60.13(c) (ii) shall use Performance Specification 2. Methods 6 or 6C and 3 or 3A shall be used for conducting the relative accuracy evaluations 60.105(a)(4) Periods of excess emissions (i) 12-hour periods where concentration exceeds average of 250 ppm, dry, at 0% O2 60.106 Test methods and procedures (i) Methods in Appendix A (i) Determination of compliance with SO2 limit (ii) Methods to determine SO2 concentration Y 60.106(f)(1) Methods to determine O2 concentration Y Methods to determine O2 concentration				,
60.105(a)(5) Span values: 500 ppm SO2 and 25% O2 (i) 60.105(a)(5) The performance evaluations for this SO2 monitor under \$60.13(c) Y (ii) shall use Performance Specification 2. Methods 6 or 6C and 3 or 3A shall be used for conducting the relative accuracy evaluations 60.105(e)(4) Periods of excess emissions Y 60.105(e)(4) 12-hour periods where concentration exceeds average of 250 ppm. Y (i) dry, at 0% O2 60.106 Test methods and procedures Y 60.106(a) Methods in Appendix A 60.106(f) Determination of compliance with SO2 limit Y 60.106(f)(1) Methods to determine SO2 concentration Y 60.106(f)(3) Methods to determine O2 concentration				
60.105(a)(5) The performance evaluations for this SO2 monitor under §60.13(c) (ii) shall use Performance Specification 2. Methods 6 or 6C and 3 or 3A shall be used for conducting the relative accuracy evaluations 60.105(e)(4) Periods of excess emissions Y 60.105(e)(4) 12-hour periods where concentration exceeds average of 250 ppm. Y (i) dry, at 0% O2 60.106 Test methods and procedures Y 60.106(a) Methods in Appendix A Y 60.106(f) Determination of compliance with SO2 limit Y 60.106(f)(1) Methods to determine SO2 concentration Y 60.106(f)(3) Methods to determine O2 concentration	60.105(a)(5)			
60.105(e)(4) 12-hour periods where concentration exceeds average of 250 ppm. Y (i) dry, at 0% O2 Y 60.106 Test methods and procedures Y 60.106(a) Methods in Appendix A Y 60.106(f) Determination of compliance with SO2 limit Y 60.106(f)(1) Methods to determine SO2 concentration Y 60.106(f)(3) Methods to determine O2 concentration Y	60.105(a)(5)	shall use Performance Specification 2. Methods 6 or 6C and 3 or 3A	Y	
(i) dry, at 0% O2 60.106 Test methods and procedures Y 60.106(a) Methods in Appendix A Y 60.106(f) Determination of compliance with SO2 limit Y 60.106(f)(1) Methods to determine SO2 concentration Y 60.106(f)(3) Methods to determine O2 concentration Y	60.105(e)(4)	Periods of excess emissions	<u> Y</u>	
(i) dry, at 0% O2 60.106 Test methods and procedures Y 60.106(a) Methods in Appendix A Y 60.106(f) Determination of compliance with SO2 limit Y 60.106(f)(1) Methods to determine SO2 concentration Y 60.106(f)(3) Methods to determine O2 concentration Y	60.105(e)(4)	12-hour periods where concentration exceeds average of 250 ppm.	<u>Y</u>	
60.106(a) Methods in Appendix A Y 60.106(f) Determination of compliance with SO2 limit Y 60.106(f)(1) Methods to determine SO2 concentration Y 60.106(f)(3) Methods to determine O2 concentration Y		dry, at 0% O2		
60.106(f) Determination of compliance with SO2 limit Y 60.106(f)(1) Methods to determine SO2 concentration Y 60.106(f)(3) Methods to determine O2 concentration Y	60.106	Test methods and procedures	Y	
60.106(f) Determination of compliance with SO2 limit Y 60.106(f)(1) Methods to determine SO2 concentration Y 60.106(f)(3) Methods to determine O2 concentration Y	60.106(a)	Methods in Appendix A	<u>Y</u>	
60:106(f)(1) Methods to determine SO2 concentration Y 60:106(f)(3) Methods to determine O2 concentration Y		Determination of compliance with SO2 limit	Y	
60.106(f)(3) Methods to determine O2 concentration Y		Methods to determine SO2 concentration	<u>Y</u>	
		Methods to determine O2 concentration	Y	
, (60.107	Reporting and recordkeeping requirements	Y	
60.107(d) Data availability Y			Y	

S1001 – SULFUR PLANT UNIT 234, S1002 – SULFUR PLANT UNIT 236 S1003 – SULFUR PLANT UNIT 238, S301 – MOLTEN SULFUR PIT 234 S302 – MOLTEN SULFUR PIT 236 AND S303 – MOLTEN SULFUR PIT 238

830	02 – MOLTEN SULFUR PIT 236 AND S303 – WOLTEN S		
Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.10(c)(1)	All required CMS measurements	Y	
63.10(c)(2)	[reserved]	Y	
63.10(c)(3)	[reserved]	Y	
63.10(c)(4)	[reserved]	Y	
63.10(c)(5)	Date and time when CMS was inoperative	Y	
63.10(c)(6)	Date and time when CMS was out-of-control	. Y	
63.10(c)(9)	[reserved]	Y	
63.10(c)(10)	The nature and cause of any malfunction	Y	
63.10(c)(11)	Corrective action or preventive measures	Y	
63.10(c)(12)	Nature of repairs or adjustments	Y	
63.10(c)(13)	Process operating time	Y	
63.10(c)(14)	Procedures in quality control program	Y	
63.10(c)(15)	Use of startup, shutdown, and malfunction plan	Y	
63.10(d)	General reporting requirements	Y	
63.10(d)(1)	Reports to the Administrator	Y	
63.10(d)(4)	Progress reports	Y	
63.10(d)(5)(i)	Periodic startup, shutdown, and malfunction reports	Y	
63.10(d)(5)	Immediate startup, shutdown, and malfunction reports (reports not	Y	
(ii)	required if actions consistent with the SSM plan, unless requested by permitting authority)		
63.10(e)	Additional reporting requirements for sources with continuous monitoring systems	Y	
63.10(e)(1)	General (Applicable since facility has chosen to comply with NSPS SO2 standard)	Y	
63.10(e)(2)	Reporting results of continuous monitoring system performance evaluations (Applicable since facility has chosen to comply with NSPS SO2 standard)	Y	
63.10(f)	Waiver of recordkeeping or reporting requirements	Y	
63.11	Control device requirements (Applicable to flares)	Y	
63.15	Availability of information and confidentiality	Y	
40 CFR 63	National Emission Standards for Hazardous Pollutants for	Y	Notification
Subpart	Petroleum Refineries: Catalytic Cracking Units, Catalytic		by 8/9/02;
שטע	Reforming Units, and Sulfur Recovery Units (4/11/02) for S1001,		compliance
	S1002, & S1003		by 4/11/05
63.1561	Am I subject to this subpart?	Y	
63.1562(a)	New, reconstructed, or existing affected sources	Y	
63.1562(b)(3)	Sulfur recovery units and tail gas treatment units	Y	<u> </u>

Table IV – U Source-specific Applicable Requirements \$1001 – Sulfur Plant Unit 234, \$1002 – Sulfur Plant Unit 236 \$1003 – Sulfur Plant Unit 238, \$301 – Molten Sulfur Pit 234 \$302 – Molten Sulfur Pit 236 and \$303 – Molten Sulfur Pit 238

22	UZ – WIOLTEN SULFUR PIT 230 AND 8303 – WIOLTEN	DULTURIII 2	127 Alemandal and their income or a fee
Applicable : Requirement	Regulation Title or Land Control Land Contro	Federally Enforceable (Y/N)	Future Effective Date
63.1576(i)	Records onsite for 2 years; may be maintained offsite for remaining	Y	
	3 years		
BAAQMD			
Condition			
19278	1		rstone
	Annual source test to verify SO3 and H2SO4 exhaust	Y	
	concentrations. [Basis: Regulation 6-330]		
Part 4	Visible emissions monitoring for particulate [Basis: Regulation	Y	
	2-6-503]		
Part 5	Installation of ports for particulate testing and source test within 90	Y	After turn-
1	days of next turnaround [2-6-503]		around
Part 6	Throughput limits [Cumulative Increase]	Y	
BAAQMD	APPLIESCABLE TO S1002, S1003 ONLY		
Condition			
21099			
Part 1	Light hydrocarbon control valve requirements [Basis: BACT]	Y	
Part 2	Light hydrocarbon flange/connector requirements [Basis: BACT]	Y	
Part 3	Centrifugal compressor requirements [Basis: BACT]	Y	
Part 4	Light hydrocarbon centrifugal pump requirements [Basis: BACT]	Y	
Part 5	Monitoring and repair program requirement [Basis: BACT]	Y	
Part 6	ULSD project component count report requirement [Basis: BACT,	Y	
	Cumulative Increase, Toxic Management Policy]		
BAAQMD	Throughput limits for sources S1001, S1002, S1003, S301, S302,	N	
Condition	S303 [Basis: 2-1-234.3]	,	
20989, Part			
A	200 A		
BAAQMD	APPLIES TO S301, S302, S303		
Condition			
22964			
	Throughput limit for S301, S302, S303 [Cumulative Increase]	<u>Y</u>	
Part 4	Abatement requirement for S301 [Consent Decree Case No. 05-	Y	,
	0258, paragraph 123, DATE: 1/27/05; Consent Decree Case No.		
	05-0258 amendment, paragraph 123, DATE: 5/1/07; 40 CFR		
	60.104(a)(2)(i)]		
Part 5	Abatement requirement for S302 [Consent Decree Case No. 05-	Y	
	0258, paragraph 123, DATE: 1/27/05; Consent Decree Case No.		
	05-0258 amendment, paragraph 123, DATE: 5/1/07; 40 CFR		نـــــــن

Table IV - U

Source-specific Applicable Requirements

S1001 – SULFUR PLANT UNIT 234, S1002 – SULFUR PLANT UNIT 236 S1003 – SULFUR PLANT UNIT 238, S301 – MOLTEN SULFUR PIT 234 S302 – MOLTEN SULFUR PIT 236 AND S303 – MOLTEN SULFUR PIT 238

Applicable	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	60.104(a)(2)(i)]		
Part 6	Abatement requirement for S303 [Consent Decree Case No. 05-0258, paragraph 123, DATE: 1/27/05; Consent Decree Case No. 05-0258 amendment, paragraph 123, DATE: 5/1/07; 40 CFR 60.104(a)(2)(i)]	Y	
Part 7	Maintenance allowance for sulfur pits [Consent Decree Case No. 05-0258 amendment, paragraph 123, DATE: 5/1/07]	<u>Y</u>	

This section has been removed from BAAQMD Regulations because it has been superseded. Nevertheless, the source must comply with this regulation until US EPA has reviewed and approved (or disapproved) the District's revision of the regulation.

Following is a list showing determinations of non-applicability of various parts of the rules for the SRUs.

Section	Reason:
	Not Applicable
60.7(e)	Report frequency is semi-annual
60.13(g)	Effluents are not combined
60.13(i)	No alternative monitoring plan is approved
60.13(j)	Alternative relative accuracy test has not been requested.
60.14	The source is already subject to NSPS due to the consent decree.
60.15	The source is already subject to NSPS due to the consent decree.
60.16	This section applies to EPA.
60.17	This section incorporates materials by reference.
60.18	The sources are not controlled by flares.
63.6(b)(7)	Facility is a major source.
63.6(c)(5)	Facility is a major source.
63.6(h)	No MACT opacity or visible emissions standards
63.6(j)	No request for presidential compliance exemption
63.8(c)(2) and (3): Note in	Note refers to parametric monitoring, which is not being used.
Table 44	,
63.8(c)(4)(i) and (5)	No COMs
63.9(f)	No MACT opacity standard
63.10(d)(3)	No MACT opacity standard
63.10(e)(4)	No MACT opacity standard
63.13	Contains agency addresses
63.1569	SRUs have no bypass lines.
63.1570(b)	No MACT opacity standard
63.1571(a)(2)	No limit has a 30-day averaging period
63.1571(a)(3)	Source not reconstructed between 9/11/98 and 4/11/02
63.1571(a)(4)	Source not reconstructed between 9/11/98 and 4/11/02
63.1571(c)	Facility has not chosen to use an engineering assessment.
63.1571(d)	Facility is not using a continuous parameter monitor.
63.1571(e)	Facility is not using a continuous parameter monitor.

Parts 2 and 3 will be incorporated in the action that incorporates most of the revisions for Application 13424, the Clean Fuels Expansion Project. These parts concern the new proposed sulfur pit, S465. The same condition number is being used so that in the future the sulfur pits will be subject to only one condition.

CONDITION 22964

Sources S301, S302, S303, Sulfur Pits

The owner/operator shall ensure that the throughput of molten sulfur at S301, S302, and S303 combined does not exceed 98,915 long tons per consecutive 12-month period. [Cumulative Increase]

- The owner/operator shall ensure that S301, Molten Sulfur Pit, is abated by A8, Stretford
 Evaporative Cooler. [Consent Decree Case No. 05-0258, paragraph 123, DATE: 1/27/05;
 Consent Decree Case No. 05-0258 amendment, paragraph 123, DATE: 5/1/07; 40 CFR
 60.104(a)(2)(i)]
 - The owner/operator shall ensure that S302, Molten Sulfur Pit, is abated by A9, Stretford Evaporative Cooler. [Consent Decree Case No. 05-0258, paragraph 123, DATE: 1/27/05; Consent Decree Case No. 05-0258 amendment, paragraph 123, DATE: 5/1/07; 40 CFR 60.104(a)(2)(i)]
- 6. The owner/operator shall ensure that S303, Molten Sulfur Pit, is abated by A10, Stretford Evaporative Cooler. [Consent Decree Case No. 05-0258, paragraph 123, DATE: 1/27/05; Consent Decree Case No. 05-0258 amendment, paragraph 123, DATE: 5/1/07; 40-CFR-60.104(a)(2)(i)]
- 7. Notwithstanding the requirements of parts 4-6, the owner/operator may disconnect the vent lines from S301, S302, and S303, Molten Sulfur Pits, to A8, A9, and A10, Stretford Evaporative Coolers, for periodic maintenance without penalty, as long as the owner/operator takes reasonable measures to minimize emissions while such periodic maintenance is being performed. [Consent Decree Case No. 05-0258 amendment, paragraph 123, DATE: 5/1/07]

Condition 18255 is shown for information only.

CONDITION 18255

FOR SOURCES S296 AND S398, FLARES

- 1. Deleted Application 12601.
- 2. Deleted Application 12601
- 3. For the purposes of these conditions, a flaring event is defined as a flow rate of vent gas flared in any consecutive 15 minutes period that continuously exceeds 330 standard cubic feet per minute (scfin). If during a flaring event, the vent gas flow rate drops below 330 scfin and then increases above 330 scfin within 30 minutes, that shall still be considered a single flaring event, rather than two separate events. For each flaring event during daylight hours (between sunrise and sunset), the owner/operator shall inspect the flare within 15 minutes of determining the

Table VII - Na

Applicable Limits and Compliance Monitoring Requirements \$304-U-229 LIGHT NAPHTHA HYDROTREATER;

S305 - U-230 Prefractionator / Naphtha Hydrotreater;

S306-U-231 Platforming Unit; S307-U-240 Unicracking Unit;

S308 - U-244 REFORMING UNIT; S309 - U-248 UNISAR UNIT;

S318 – U-76 GASOLINE / MID-BARREL BLENDING UNIT;

S319 – U-215 GASOLINE FRACTIONATING UNIT;

S322 - U-40 RAW MATERIALS RECEIVING; S435 - REFORMATE SPLITTER;

S436 - DEISOPENTANIZER; S437 - HYDROGEN PLANT;

S460 - U-250 ULSD HYDROTREATER

	S460 - U-250 ULSD HYDROTREATER								
Type of		33	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring		
Limit	of Limit	Y/N	Date	Limit	Eitation :	(P/C/N)	Type		
POC	BAAQMD	Y		abatement of emissions	8-10-401.2	P/E	Records		
	8-10-301			from process vessel	(SIP) and 8-				
				depressurization is required	10-501 & 502				
				until pressure is reduced to	(non-SIP)				
				less than 1000 mm Hg 1000					
				mm Hg (4.6 psig)					
VOC	BAAQMD	Y		emission streams with 15	BAAQMD	P/D	visual		
(S307	Condition			lb/day AND 300 ppm total	Condition		inspection		
only)	6671, Part			carbon on a dry basis	6671, Part 4				
	2 and			prohibited					
	8-2-301				BAAQMD	P/A	source test		
					Condition				
					6671, Part 6				
throughput	BAAQMD	Y		12,198 bbl/day (monthly	BAAQMD	P/D	records		
(S304	Condition			average)	Condition				
only)	21095,				21095, Part 2				
	Part 1								
throughput	BAAQMD	Y		35,000 bbl/day (monthly	BAAQMD	P/D	records		
(S460	Condition			average)	Condition				
only)	21094,				21094, Part 2				
	Part 1								
throughput	BAAQMD	Y		S305: 9.23 E 6 bbl/yr	BAAQMD	P/M	records		
	Condition			S306: 5.66 E 6 bbl/yr	Condition	·			
	20989,			S307: 1.39 E 7 bbl/yr	20989, Part A				
	Part A			S435: 6.6 E 6 bbl/yr		,			
				S436: 4.7 E 6 bbl/yr					
				S437: 10.4 E 9 ft3/yr					

Table VII - Na

Applicable Limits and Compliance Monitoring Requirements S304 –U-229 LIGHT NAPHTHA HYDROTREATER;

S305 – U-230 Prefractionator / Naphtha Hydrotreater;

S306 - U-231 PLATFORMING UNIT; S307 - U-240 UNICRACKING UNIT;

S308 - U-244 REFORMING UNIT; S309 - U-248 UNISAR UNIT;

S318 - U-76 GASOLINE / MID-BARREL BLENDING UNIT;

S319 - U-215 GASOLINE FRACTIONATING UNIT;

S322 - U-40 RAW MATERIALS RECEIVING; S435 - REFORMATE SPLITTER;

S436 - DEISOPENTANIZER; S437 - HYDROGEN PLANT; S460 - U-250 ULSD HYDROTREATER

Type of Limit	Citation	FE	Future Effective Date		Monitoring Requirement Citation	Frequency	Monitorin
throughput		N		S308: 5.11 E 6 bbl/yr	BAAQMD	P/M	records
	Condition			S309: 6.6 E 8.bbl/yr	Condition		
	20989,			S318: 3.3 E 7 bbl/yr	20989, Part A		•
	Part A			S319: 3.51 E 6 bbl/yr			

Part A

BAAQMD

Condition

22549, Part 1

throughput

Y

Table VII - Nb Applicable Limits and Compliance Monitoring Requirements S306 - U-231 PLATFORMING UNIT; S308 - U-244 REFORMING UNIT;

S318: 113,150 bbl/day

(except for diesel, which

does not have a daily limit)

BAAQMD

Condition

22549, Part 2

P/D

records

Type of Type o	Gitation of Limit BAAQMD 8-10-301	Y	Future: Effective. Date	abatement of emissions from process vessel depressurization is required until pressure is reduced to less than 1000 mm Hg1000 mm Hg (4.6 psig)	Monitoring Requirement Sitation 8-10-401.2 (SIP) and 8- 10-501 & 502 (non-SIP)	Monitoring Frequency (P/C/N) P/E	Monitoring: Type Records
TOC	40 CFR 63.1566(a) (1)(i) or (1)(ii) as shown below	Y		Vent to flare meeting control device requirements in 63.11(b)	40 CFR 63.11 (b)(5)	<u>C</u>	Thermocoup le to detect presence of flame

Table VII – Nb
Applicable Limits and Compliance Monitoring Requirements
S306 – U-231 PLATFORMING UNIT; S308 – U-244 REFORMING UNIT;

S306 – U-231 Platforming Unit; S308 – U-244 Reforming Unit;							
Type of Limit	Citation of Limit	EXX	Future Effective Date	Linguista de la companya de la comp La companya de la co	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TOC	40 CFR 63.1566(a) (1)(ii)	Y		98% control of non- methane TOC by weight or concentration of 20 ppmw as hexane, dry @ 3% O2, whichever is less stringent (Applies to S306, may apply to S308	40-CFR 63-11(b)(5) Monitoring to be determined during intial compliance demonstratio n for chosen control and according to Table 17 & 18	ΦI	Thermo- couple to detect presence of flame
<u>HCl</u>	40 CFR 63.1567(a) (1)	Y		For S306: 92% reduction or to concentration of 30 ppmv, dry @ 3% O2	40 CFR 63.1572(c)(1) and (2) or Monitoring to be determined during initial compliance demon- stration for 92% reduction	<u>P/E</u>	Color-metric monitoring for ppmv limit
· HCl	40 CFR 63.1567(a) (1)	¥		For S308: 30 ppmv, dry @ 3% O2	40 CFR 63.1572(e)(1) and (2)	<u>P/E</u>	Golor-metric monitoring
throughput	BAAQMD Condition 20989, Part A	Y .		S306: 5.66 E 6 bbl/yr	BAAQMD Condition 20989, Part A	P/M	records
throughput	BAAQMD Condition 20989, Part A	N		S308: 5.11 E 6 bbl/ут	BAAQMD Condition 20989, Part A	P/M	records

Visible emissions monitoring was added for the SRUs in Application 12601. The use of the periodic monitoring guidelines for gaseous-fueled sources was not appropriate because the SRUs are not solely combustion sources. The citation has been corrected from part 3 to part 4 of BAAQMD Condition 19278.